

IN THE CLAIMS

Please amend the claims as follows:

1-10. (Cancel)

11. (Currently Amended) A coating and developing treatment system for performing a coating and developing treatment for a substrate, comprising:

a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;

an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;

a density measuring unit for measuring the density of impurities at least inside said processing zone or said interface section;

a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; ~~and~~

a reduced-pressure control unit for controlling at least the predetermined pressure or predetermined time based on the value measured by said density measuring unit; and

a controller for classifying the density of the impurities into predetermined density ranges, storing the predetermined pressure and the predetermined time corresponding to the respective density ranges, and controlling said reduced-pressure control unit to adjust the predetermined pressure and the predetermined time to equal to the stored predetermined

pressure and predetermined time corresponding to the predetermined density range to which the measured value belongs.

12. (Cancel)

13. (Currently Amended) A coating and developing treatment system ~~according to claim 11~~ for performing a coating and developing treatment for a substrate, comprising:
a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;
an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;
a density measuring unit for measuring the density of impurities at least inside said processing zone or said interface section;
a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; and
a reduced-pressure control unit for controlling at least the predetermined pressure or predetermined time based on the value measured by said density measuring unit,

wherein said reduced-pressure control unit also controls pressure-reducing speed at the time of reducing the pressure of the chamber to the predetermined pressure, also based on the value measured by said density measuring unit.

14. (Currently Amended) A coating and developing treatment system for performing

a coating and developing treatment for a substrate, comprising:

a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;

an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;

a casing for accommodating said processing zone and said interface section;

a density measuring unit for measuring the density of impurities inside a clean room which is disposed outside said casing and in which the system is placed;

a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; ~~and~~

a reduced-pressure control unit for controlling at least the predetermined pressure or the predetermined time of said reduced-pressure impurity removing unit based on the value measured by said density measuring unit; and

a controller for classifying the density of the impurities into predetermined density ranges, storing the predetermined pressure and the predetermined time corresponding to the respective density ranges, and controlling said reduced-pressure control unit to adjust the predetermined pressure and the predetermined time to equal to the stored predetermined pressure and predetermined time corresponding to the predetermined density range to which the measured value belongs.

15. (Cancel)

16. (Currently Amended) A coating and developing treatment system ~~according to claim 14~~ for performing a coating and developing treatment for a substrate, comprising:
a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;
an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;
a casing for accommodating said processing zone and said interface section;
a density measuring unit for measuring the density of impurities inside a clean room which is disposed outside said casing and in which the system is placed;
a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; and
a reduced-pressure control unit for controlling at least the predetermined pressure or the predetermined time of said reduced-pressure impurity removing unit based on the value measured by said density measuring unit,

wherein said reduced-pressure control unit also controls pressure-reducing speed at the time of reducing the pressure of the chamber to the predetermined pressure, also based on the value measured by said density measuring unit.

17. (Original) A coating and developing treatment system for performing a coating

and developing treatment for a substrate, comprising:

a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;

an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;

a density measuring unit for measuring the density of impurities at least inside said processing zone or said interface section;

a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; and

a reduced-pressure control unit for controlling pressure-reducing speed of the reduced-pressure impurity removing unit based on the value measured by said density measuring unit.

18. (Original) A coating and developing treatment system for performing a coating and developing treatment for a substrate, comprising:

a processing zone having a coating treatment unit for forming a coating layer on the substrate, a developing treatment unit for performing a developing treatment for the substrate, and a heat treatment unit for performing a heat treatment for the substrate;

an interface section for carrying the substrate between said processing zone and an aligner not included in the system for performing an exposure processing for the substrate;

a casing for accommodating said processing zone and said interface section;
a density measuring unit for measuring the density of impurities inside a clean room which is disposed outside said casing and in which the system is placed;
a reduced-pressure impurity removing unit having a chamber which can be closed airtightly for reducing the pressure inside the chamber to a predetermined pressure before the substrate undergoes the exposure processing to remove the impurities adhering to the coating layer on the substrate inside the chamber for a predetermined time; and a reduced-pressure control unit for controlling pressure-reducing speed of said reduced-pressure impurity removing unit based on the value measured by said density measuring unit.

19. (Original) A coating and developing treatment system according to claim 11, wherein said interface section and the aligner are connected with each other via a delivery section and said reduced-pressure impurity removing unit is disposed in the delivery section.

20. (Original) A coating and developing treatment system according to claim 16, wherein the delivery section has a first path along which the substrate passes when carried from said interface section to the aligner; and a second path along which the substrate passes when carried from the aligner to said interface section, and said reduced-pressure impurity removing unit is disposed in the first path.

21. (Original) A coating and developing treatment system according to claim 11, wherein said reduced-pressure impurity removing unit is disposed in said interface section.